Information and Communication Technology Components in Library and Information Science education in Indian Universities: a Study

Synopsis submitted for approval of Registration of title to Karnataka State Akkamahadevi Women's University, Vijayapura for the award of the degree of

Doctor of Philosophy

In

LIBRARY AND INFORMATION SCIENCE

By

Rupali Kumbhar

Research Guide

Prof. P. G. TADASAD

Professor and Chairman of Library and Information Science

DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE

AKKAMAHADEVI WOMEN'S UNIVERSITY, VIJAYAPURA, KARNATAKA

(Formerly: Karnataka State Women's University, Vijayapura)

2017

TABLE OF CONTENTS

CHAPTER	TITLE	PAGE NO.
1	Introduction	3
2	Literature Review on LIS Education	3-6
3	Need of the Study	6-7
4	Research Problem	7
5	Research Objective	7
6	Hypothesis	7
7	Research Design	8
8	Sample	8
9	Scope and Limitations of the Study	8-9
10	Operational Definition of Terms and Concepts	9
11	Tentative Scheme of Chapterisation	9-10
-	References	

CHAPTER - I: INTRODUCTION

1. INTRODUCTION

The advent of the information society has called into question many of our assumptions about education. New information communication technologies are drastically changing the way we think, the way we live and the environment in which we live. In general we are talking about technologies and tools that people use to share, distribute, gather information, and to communicate with one another or in groups, through the use of computers and interconnected computer network. ICT has emerged as a major tool for teaching and learning through its potential as a source of knowledge, a medium to transmit content, a means of interaction and dialogue. Thus, ICT is both a cause of change and a means of achieving it. The developments of in information technologies dictate that the library and information professionals must have Information Technology competencies and management skills to manage information services.

Library and Information Science education is generally imparted so as to produce a class of information experts those will be efficiently administer the libraries of different kinds as well as information centers and systems on different subject field efficiently and effectively. This profession is aimed at to provide need based information services to individual and the society as a whole. There is, thus, an intimate as well as harmonious relationship between libraries and information centers, libraries and information experts and individual (S) in a society. The success of libraries and information experts mainly depends on variety of factors such as availability of resources, information needs, and information building capacity, information use, information sources, information technology and others of a society. The science and art utilized in identification, collection, origination, dissemination of information as well as universe of documents and their use which constitute the library and information science education though LIS curricula is to be designed and re-modified from time to time and again so as to meet the present day need and that would be adaptive for the future need and that is why the curriculum development needs to be extensively dialoged among the LIS teachers and practitioners in India.

2. LITERATURE REVIEW ON LIS EDUCATION

2.1 World Scenario:

Corbin (1988) examines education in schools of library and information sciences, and the responsibilities of libraries in the continuation of the education of their librarians in the area of utilization of information technology. Nweke (1989) examines the fundamental responsibilities of

the Maiduguri Library School, Nigeria, and its objectives. Malinconico (1992) observes that library education prepares for an environment, in which librarians will need to work with other groups interested in delivering information services to end users. Stueart (1993) discusses ways in which information access, as a key concept in library and information science education, can be enhanced by new information technologies and ways in which these developments impact on curricula, recruitment of faculty with particular expertise, and the placement of graduates.

Cox and Rasmussen (1997) considers the debate in the USA as to whether the basic librarianship degree should be generalized as an entry degree, or specialized in order to support library and information professionals working in specific roles or institutional environments.Mahamood(1997) presents a brief history of information technology training in Pakistan and discusses in detail the most recent developments in the library and information science curriculum.Pors (1997)analyses the possible future changes which will affect library and information science education and continuing education as a result of rapid developments in information technology and synthesizes the results of earlier investigations conducted in Denmark as background to the discussion.

Zurawska and Zurawaski (1997) reviews the changes that have taken place in the Department of Librarianship and Information Science, Nicholas Copernicus University, Poland, as a result of the growing emphasis on information technology techniques in general and the Internet and World Wide Web (WWW) in particular.Connaway (1997) describes a new library and information services programme at University College of the University of Denver which was designed to incorporate the research and scholarly thought and the practice of the library and information science discipline with other related disciplines. The cataloguing component developed for the programme utilizes active learning techniques supplemented by a theoretical core.

He (1999) looks at information technology (IT) oriented courses taught at 4 LIS schools: at the Universities of California (Berkeley), Iowa, Louisiana, and Tennessee, during 6 selected academic years between the period 1971 and 1995. Sulistyo (1999) presents a brief history of information technology related training for library school students in Indonesia, including the most recent developments in the library and information science curriculum with special reference to Indonesia University, the nation's oldest library education institution.Jarvella (1999) describes the Associate Degree in Library and Information Technology a distance learning degree offered by the University of Mine through the Education Network of Mine.

Davis(2000) points to the importance of catalyzing change in education so that it can serve the needs of widely networked societies and support action to redress the growing imbalances of a digital divide. Russel, Finger and Russel (2000) argue that teacher preparation in the use of information technology is currently characterized by the provision of low level computer skills. In contrast, the complexities of life in the 21st century and demands for teacher competencies in learning technology will require a paradigm in which teachers routinely use advanced computer skills and embed the use of information technology across all aspects of the school curriculum. According to Minishi-Majanja (2003) observes that African LIS educators recognise the importance of intensifying information technology courses in their curricula to be relevant, visible and competitive in an increasingly globalised and networked world.

Davis (2000) notes the widespread change which is under way across the world to infuse information technology into teacher education. Such thinking is at the forefront of many government and multinational company policies, with explicit and implicit links between education and the emerging knowledge economies. The pivotal role of initial teacher education is recognized and so are impending teacher shortages. Pearson (2001) reviews the Hong Kong policy (1998) on information technology in education (ITE). Nandhivajrani (1998) reviews the activities of Thai library schools in providing courses on the subject of computerized information retrieval.

Barraket and Scott (2001) reports the key findings of an empirical research conducted at the Sydney University of Technology, commissioned by the Department of Education, Training and Youth Affairs (DETYA).Horvat(2000)has argued that the changes brought about by the new information and communication technology have a great impact on LIS education that requires more than habitual updating of the curriculum content practiced up to the present. Apart from a number of new topics that have to be introduced into the curriculum, the form of the delivery of the content has to be changed. Modular form of delivery of LIS educational topics has become common and its adoption is related to the influence of technology that usually approaches the problems one-by-one as separate issues.

2.2 Indian Scenario:

Malwad (1982)suggests the inclusion of recent technological innovations in library and information science syllabi in India. Sengupta and Umarani (1996)reports on the rapid growth of Information technology (IT) in the libraries of India and advocates the incorporation of appropriate IT courses in library and information science education.Murthy [1997] discusses the impact and use

of all these technologies on library and information science education, with a focus on developments in India.Amba (1998) considers the introduction of the subject in LIS education and training, highlighting aspects that library and information professionals need to be made aware of, such as the computer and its peripherals, lighting, furniture and layout of work areas. Madalli (1999) reviews areas of the library and information science curriculum, taught at library schools that require revision to include the Internet and World Wide Web.

Kumar & Sharma (2007 discusses the need for e-learning centred education for LIS professionals and throws light on some of the e-learning centred education models for LIS Education. Janakiraman, Ormsby& Subramanian (2016) emphasized the necessity of restructuring LIS syllabus with inclusion of ICT components in Indian schools to meet the current job requirements in LIS job opportunities.

3. NEED OF THE STUDY:

Library and Information Science in India celebrated a Centenary Year in 2011. During these hundred years of time, LIS education is changing its nature and roles. Though the fundamentals of library science remain the same ICT has reshaped LIS education and profession. Libraries are continuously improving themselves with up-to-date computer technologies for knowledge transmission and networks. Because of Internet technologies library and information services moved into a digital age, ordering and cataloguing process are done automatically; and research and research service were provided into twenty-four hours, and the library exists beyond a physical space. To provide efficient services, the library professionals need to have knowledge of ICT technologies and skills to handle library procedures. Thus, need to analyse ICT components in LIS education to keep in step with the latest technology and modern computer networking experiences.

ICT has opened new opportunities to LIS professionals. Now a days a librarian position is changing and generated new designations like, system librarian, electronic resource librarian, library web application specialist, electronic resource manager,head of research repository, digital archives manager, information analyst, knowledge manager etc. These positions are available only for ICT trained library professionals. By using ICT technology libraries provide electronic provision of services and processing the dissemination of knowledge. It becomes cost effective to handle electronic information and end user will get precise information with the help of strong search engines. Looking of ICT development in LIS job market, employer’s expectations are very high. They required ICT training, skills to handle modern libraries. Which include managing the ICT

environment and deliver e-resources to end-users. Apart from ICT techniques required ICT skills, which includes provide office applications, managing library automation systems, conserve databases in the libraries, design library web page, online searching to retrieve information. These skills are helpful to run a modern library. Though the ICT techniques are already available in LIS schools there is a need to analyse the current ICT skills, ICT development and ICT training according to market requirements.

Emergence of ICT technologies for library services become very fast to retrieval of global-level information for library end users. To provide various online services like, OPAC, selective disseminate information, CDROM searching, online databases, e-books, e-journals, digital archives, virtual helpdesk etc. use of ICT tools to provide disseminate information to end users. Various libraries are adopting ICT facilities slowly, may be due to less funds and management reasons. So libraries should invest in ICT technology, applications, and provide required training skills to librarians. ICT technologies are current requirement of today's libraries.

4. RESEARCH PROBLEM

"Information and Communication Technology components in Library and Information Science education in Indian Universities: A Study"

5. RESEARCH OBJECTIVES

The main objective of the study is to evaluate the ICT components in Library and Information Education. The specific objectives of the study are as follows:

1. To compare the LIS curriculum of different Universities.
2. To identify and study the ICT components in LIS curriculum.
3. To identify the challenges and opportunities to add ICT components in LIS education curriculum.
4. To find out the employers expectations of ICT components in LIS education.
5. To identify the stakeholders opinions on the extent of inclusion of ICT components in LIS education.
6. To propose suggestions for improvement in LIS curricula.

6. HYPOTHESIES

1. There is no similarity in ICT components in LIS curriculum in Indian Universities.

2. LIS education syllabi are theoretical oriented and neglected practical/skill development aspects.
3. LIS schools do not have adequate ICT infrastructure.
4. Majority of the LIS schools do not have adequate trained faculty.
5. Employer's expectations and stakeholders opinions are not considered in the syllabi.

7. RESEARCH DESIGN

Present study is content analysis in nature and it demands a comprehensive literature search, surveys and fact finding enquiries of different kinds. The syllabus will be analysed in-depth to understand the inclusion of ICT components in the curricula. The present LIS education contain the ICT components, but the most of the syllabus is focused on various library functions and helps in developing managerial skills among library and information science students. Hence, it is necessary to compare ICT components with other University LIS syllabus with the help of literature search, by studying their syllabus content based upon a set criterion like ICT components, frequency of updating the syllabus and fulfilling professional requirements.

A set of questionnaire will be prepared to identify the employer'sand stakeholder expectation for ICT components in LIS syllabus.

To clarify the concepts and theories of ICT components, a comprehensive literature search will be done.

To find out challenges to adopt ICT components in LIS education, a series of questionnaires and interview if necessary would be administered to LIS departments.

8. SAMPLE

The study is carried out by content analysis method. The total research sample consists of LIS Departments from Indian Universities. After collecting the data, the analysis of proposed research shall be done with the help of professional statistician and by using Standard Statistical Package or Software. For the stakeholders opinion of inclusion for ICT components in LIS education sample includes LIS faculty and working librarians.

9. SCOPE AND LIMITATIONS OF THE STUDY

The sample population for the proposed research work will be limited to PG level course through regular mode by the Universities. All the Indian Universities with Library and Information

Science Department be covered. However, this study does not include Diploma, Certificate courses of L.I.Sc., Open universities, distance education and colleges affiliated to universities.

Employer's expectations' of ICT components includes namely special librarian, University librarian, academic librarian and contact libraries librarian. A stakeholder includes working librarians and excluded students.

10. OPERATIONAL DEFINITION OF TERMS AND CONCEPTS

Information Technology

ALA Glossary of Library and Information Science defined IT as "the application of computers and other technologies to the acquisition, organization, storage, retrieval and dissemination of information" (American Library Association, 1983).

Information Communication Technology

Adeyoyin (2005) cites Bayode who defines ICT as "the acquisition, processing, storage, and dissemination of information by means of computers and other telecommunication equipment."

University:is an institution of higher (or tertiary) education and research which awards academic degrees in various academic disciplines.

University Department: University department means a department established and maintained by the University.

Department: Means a department teaching a particular subject or a group of subjects prescribed in the statutes.

LIS School: School of Library and Information science, where Library and Information science courses are imparted, and it may be aUniversity / Institution / Affiliated collage

Affiliated College: Means a college which has affiliation by the university.

11. CHAPTERISATION

Chapter I - INTRODUCTION: Describes the Introductory background of the research followed by the significance and importance of the study. It introduces about the research topic, its need and the importance. It states the research problem, defines the important concepts and presents the objectives and hypotheses of the study. It also discusses methodology followed for data collection and analysis and further states the scope and limitation of the study.

Chapter II - RESEARCH METHODOLGOY: This Chapter explains the Research Methodology adopted for this study. It describes in detail factors like size of the sample, sampling procedure,

methods used for data collection, various sources of data, statistical tools used for the analysis of the data collected and the approaches to evaluation and analysis of the data for the study.

Chapter III - LITERATURE REVIEW: Literature Review shall be presented in this chapter. A thorough literature search shall be carried out in print, electronic media and other non-print media from LIS and management literature, to understand the meanings, terminology, concepts, theories and current trends in the field. It briefly discuss the studies carried on with in India and outside, about the LIS curriculum, particularly with an emphasis on ICT components in the curriculum and related areas.

Chapter IV - LIS EDUCATION IN INDIA: This chapter brings out brief historical account of the LIS education in the country with particular emphasis on LIS education in India.

Chapter V – ANALYSIS OF DATA AND RESEARCH FINDINGS: This chapter would be devoted to collection, analysis and interpretation of data to test the hypothesis.

Chapter VI – SUGGESTIONS AND CONCULSION: A detailed account of research findings from the analysis of data and suggestions based on data analysis shall be presented in this chapter. The future avenues of LIS education development will also be recommended.

REFERENCES: A list of References will be presented

APPENDICES: A Questionnaire shall be provided.

REFERENCES

Amba, S. (1998). Ergonomic factors and library automation. Information Studies, 4 (1), 33-40.

Barraket-J; Scott-G. (2001). Virtual equality? Equity and the use of information technology in higher education. Australian-Academic-and-Research-Libraries. 32 (3), p.204-12.

Chu, H. (2006). Curricula of LIS programs in the USA: a content analysis In C. Khoo, D.Singh& A.S. Chaudhry (Eds.), Proc. Asia-Pacific Conference on Library and Information Education & Practice 2006, Singapore, p.328-337.

Connaway, L. S. (1997). A model curriculum for cataloging education: The library and information services program at the University of Denver. Technical Services Quarterly, 15(1/2), 27-41. Retrieved from www.csa.com

Corbin-John. (1988). The education of librarians in an age of information technology. Journal-of-Library-Administration. 9 (4), p.77-87.

Cox-R-J; Rasmussen-E. (Fall 1997) Reinventing the information professions and the argument for specialization in LIS education: case studies in archives and information technology. Journal-of-Education-for-Library-and Information-Science. 38 (4), p.255-67.

Davis-N. (2000). Information technology for teacher education at its first zenith: the heat is on! Journal of Information Technology for Teacher Education.9 (3), p.277-86.

Davis-N. (2000) International contrasts of information technology in teacher education: multiple perspectives on change. Journal-of-Information-Technology-for-Teacher-Education.9 (2), p.19-47.

He, S. (1999). A content analysis of IT-oriented courses in LIS curricula: distribution, changing ratio, curricula topics and consensus among 4 American LIS schools. Journal of Information, Communication, and Library Science, 6(2), p. 1-9.

Hussain, Akhtar (2013), ICT based library and information services, New Delhi: EssEss, p. 7-8.

Horvat, A. (2000). Library legislation and free access to information as new topics in library and information science education. Information Research, 5(2) Retrieved from http://www.shef.ac.uk/is/publications/infres/paper72.html

Jarvella-S-M. (1999) Associate Degree in Library and Information Technology: experiment in 'virtual' library education in Maine. Library-Mosaics 7 (3), p.353-61.

Janakiraman, A., Ormsby, R., & Subramanian, N. (2016).The Role of Information Careers in India. In O. Ormasby (Ed) LIS Career at the Crossroads : Challenges and Opportunities (pp., 243-256). Kolkatta: University of Calcutta.

Kumar, K., & Sharma, J. (2007). E-learning: The learner - centred education for LIS professionals. Journal of Library and Information Science, 32(1), 1-16. Retrieved from www.csa.com.

Madalli, D. P. (1999). Gearing up to the internet: Revamping the LIS curriculum. In P. S. G. Kumar, & C. P. Vashishth (Eds.), CALIBER 99. academic libraries in the internet era. proceedings of the sixth national convention for automation of libraries in education and research, Nagpur, India, 18-20 February 1999 (pp. 504-515). Ahamadabad : Information and Library Network Centre (INFLIBNET). Retrieved from www.csa.com

Malinconico, S. (1992). What librarians need to know to survive in an age of technology. Journal of Education for Library and Information Science, 33(3), 226-40.

Mahamood-K. (1997). Information technology and library education in Pakistan: recent developments in the curriculum. Education-for-Information. 15(3), p.197-205.

Malwad, N. M. (1982). Current trends in information handling and the role of modern communication technology. International Information Communication and Education, 1(2), 203-223.

Minishi-Majanja, M. K. (2003). Mapping and auditing information and communication technologies in library and information science education in Africa: A review of the literature. Education for Information, 21(2,3), 159-179. Retrieved from www.csa.com

Murthy-S-S. (1997). Use of information technology in library and information science education. DESIDOC-Bulletin-of-Information-Technology. 17 (3), p.3-7.

Nandhivajrin-M-L-Joy. (1998). Education and training in information technology in library schools in Thailand. The use of new information technologies in developing countries. Proceedings of the International Federation for Information and Documentation, Commission for Asia and Oceania (FID/CAO), 10th Congress and General Assembly, Beijing, Chinese People's Republic, 24-26 October 1998 Edited by Barry Burton and Nancy Wrong, Hong Kong, FID/CAO, B1-B13.

Nweke-Ken-M-C. (1989). Information technology used for education for information in the Maiduguri Library School, Nigeria. Education-for-Information. 7 (1), 43-49.

Pearson-J. (2001) Information technology in education: policy and provision in Hong Kong schools. Journal-of-Information-Technology-for-Teacher-Education.10 (3) 2001, p.279-90.

Pors-N-O. (1997). Curriculum planning, continuing education and information technology: educational challenges for LIS institutions. Renewing the education and training of librarians and information professionals. Proceedings of the Closing Conference of the LISTEN TEMPUS JEO (1994-1997), Edited by Peter Muranyi, Berzsenyi College, Szombathely, Hungary, 25-27 June 1997, p.227-38.

Ramana, P. Venkata (2004). Information technology applications in libraries, New Delhi: EssEss, p. 4-5.

Russell-G; Finger-G; Russell-N. (2000). Information technology skills of Australian teachers: implications for teacher education. Journal-of-Information-Technology-for-Teacher-Education.9 (2), p.149-66.

Sengupta-S; Umarani-A. (1996) 'What' and 'why' of information technology in LIS education. Herald-of-Library-Science.35 (1-2), p.73-7.

Stueart, R.D. (1993). Library and information education at the crossroads. Asian Libraries, 3(4), 15-22.

Sulistyo-Basuki-L. (1999). Information technology and library education in Indonesia: recent developments in the curriculum. Education-for-Information. 17 (4), p.353-61.

Zurawska-K and Zurawaski-B. (1997). Changes in education of librarianship and information science connected with the development of information technology. The place of the World Wide Web. Renewing the education and training of librarians and information

professionals. Proceedings of the Closing Conference of the LISTEN TEMPUS JEO (1994-1997), Edited by Peter Muranyi, Berzsenyi College, Szombathely, Hungary, 25-27 June 1997, p.171-9.